

WHAT IS CLAIMED IS:

1. An image formation device that transfers toner images formed with toners of multiple colors onto a recording medium, 5 such as paper, so as to form a color image, said image formation device comprising:

a specification module that specifies either formation of a composite color image or formation of a monochromatic image; and

10 a control module that, when said specification module specifies formation of the composite color image, controls to selectively apply a color image adjustment operation for toner density adjustment that adjusts a toner density of each toner image formed, while controlling to selectively apply a 15 monochromatic image adjustment operation for the toner density adjustment when said specification module specifies formation of the monochromatic image.

2. An image formation device in accordance with claim 20 1, said image formation device further comprising:

an information acquisition module that acquires information on color of toner filled in each toner cartridge from each of storage elements mounted on multiple toner

cartridges, which are attached to said image formation device, wherein said specification module specifies formation of the composite color image or formation of the monochromatic image, based on the information on the color of toner acquired 5 by said information acquisition module.

3. An image formation device in accordance with claim 2, wherein the composite color image is formed with toners of at least three primary colors, cyan, magenta, and yellow, and 10 said specification module specifies formation of the composite color image when the colors of toners filled in said multiple toner cartridges include all of the three primary colors, while specifying formation of the monochromatic image when the colors of toners filled in said multiple toner 15 cartridges exclude at least one of the three primary colors.

4. An image formation device in accordance with claim 2, wherein said specification module specifies formation of the composite color image when the colors of toners filled in 20 said multiple toner cartridges include any color other than black, while specifying formation of the monochromatic image when the colors of toners filled in said multiple toner cartridges are all black.

5. An image formation device in accordance with claim 1, wherein the toner density adjustment detects a toner density of a test toner image formed and sets a control parameter for controlling toner image formation, based on the detected toner density,

the color image adjustment operation detects toner densities of multiple test toner images formed with multiple color toners and sets the control parameter, and

10 the monochromatic image adjustment operation detects a toner density of a test toner image formed with black toner and sets the control parameter.

6. An image formation device in accordance with claim 15 1, wherein the color image adjustment operation detects a toner density of a test toner image formed and sets a control parameter for controlling toner image formation, based on the detected toner density, and

20 the monochromatic image adjustment operation sets a preset monochromatic image parameter value to the control parameter.

7. An image formation device in accordance with claim

1, wherein the control parameter includes at least one of a charge potential of a photoreceptor, a light exposure of an exposure unit, a developing bias of a developer unit, and a charge potential of a transfer unit.

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8. An image formation method that transfers toner images formed with toners of multiple colors onto a recording medium, such as paper, so as to form a color image, said image formation method comprising the steps of:

10 (a) specifying either formation of a composite color image or formation of a monochromatic image; and

(b) controlling to selectively apply a color image adjustment operation for toner density adjustment that adjusts a toner density of each toner image formed when said step(a) 15 specifies formation of the composite color image, while controlling to selectively apply a monochromatic image adjustment operation for the toner density adjustment when said step(a) specifies formation of the monochromatic image.

20 9. An image formation method in accordance with claim 8, wherein said step(a) specifies formation of the composite color image or formation of the monochromatic image, based on information on color of toner acquired from each of storage

elements mounted on multiple toner cartridges, which are attached to an image formation device.

10. An image formation method in accordance with claim 5-9, wherein the composite color image is formed with toners of at least three primary colors, cyan, magenta, and yellow, and said step(a) specifies formation of the composite color image when the colors of toners filled in said multiple toner cartridges include all of the three primary colors, while 10 specifying formation of the monochromatic image when the colors of toners filled in said multiple toner cartridges exclude at least one of the three primary colors.

11. An image formation method in accordance with claim 15 9, wherein said step(a) specifies formation of the composite color image when the colors of toners filled in said multiple toner cartridges include any color other than black, while specifying formation of the monochromatic image when the colors of toners filled in said multiple toner cartridges are all 20 black.

12. An image formation method in accordance with claim 8, wherein the toner density adjustment detects a toner density

of a test toner image formed and sets a control parameter for controlling toner image formation, based on the detected toner density,

the color image adjustment operation detects toner densities of multiple test toner images formed with multiple color toners and sets the control parameter, and

the monochromatic image adjustment operation detects a toner density of a test toner image formed with black toner and sets the control parameter.

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13. An image formation method in accordance with claim 8, wherein the color image adjustment operation detects a toner density of a test toner image formed and sets a control parameter for controlling toner image formation, based on the detected toner density, and

the monochromatic image adjustment operation sets a preset monochromatic image parameter value to the control parameter.

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14. An image formation method in accordance with claim 8, wherein the control parameter includes at least one of a charge potential of a photoreceptor, a light exposure of an exposure unit, a developing bias of a developer unit, and a

charge potential of a transfer unit.